

10/562071

IAP20 Rec'd PCT/PTO 22 DEC 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : (To Be Assigned) Confirmation : (TBA)
PCT/JP2004/010315 No.
First Named Inventor : Yoshitaka SUGAWARA
Filed : December 22, 2005
TC/A.U. : (To Be Assigned)
Examiner : (To Be Assigned)
Docket No. : 102253.57240US
Customer No. : 23911
Title : High-Heat-Resistant Semiconductor Device

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §§ 1.97 AND 1.98**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, the attached Form PTO-1449 lists documents which the Examiner may deem relevant to patentability of the claims of the above-identified application.

I. Time Period of Submission

This Information Disclosure Statement is submitted:

☒ 1) no later than three months from the application's filing date or 2) before the mailing date of the first Office Action on the merits (whichever is later) or 3) before a first Office Action after the filing of a Request for Continued Examination, and therefore no statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

☐ 2) after the later of three months from the application's filing date and the mailing date of the first Office Action on the merits, but before a Final Office Action, a Notice of Allowance, or an action closing prosecution (*Ex parte Quayle*), (whichever is earlier), and therefore Applicant is filing concurrently herewith:

☐ a Statement under 37 C.F.R. § 1.97(e); or

☐ a fee in the amount of \$180.00 under 37 C.F.R. § 1.17(p).

☐ 3) after either a Final Office Action or a Notice of Allowance, but before payment of the Issue Fee, and therefore Applicant is submitting herewith:

a Statement under 37 C.F.R. § 1.97(e); and

a fee in the amount of \$180.00 under 37 C.F.R. § 1.17(p).

II. Statement Under 37 C.F.R. § 1.97(e)

☐ I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or

☐ I hereby state that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making a reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

III. Submission of Non-English Language Documents

☒ The following is a concise explanation of relevance of the non-English language documents listed in the attached Form PTO-1449:

☒ The relevance of document(s) AA-AB & AF to the subject matter of the present invention is/are provided in the specification of the above-identified application.

☒ Corresponding foreign or international report(s) citing document(s) AC-AE, together with an English-language version(s) (if not already in English) of that portion of the report(s) indicating the degree of relevance found by the foreign office(s) is/are submitted.

☐ English language family member publication(s) of document(s) _____ is/are noted on Form PTO-1449.

☒ English language abstract(s) is/are submitted for document(s) AA-AE.

☐ English translation(s) of the foreign language document(s) _____ is/are submitted herewith.

☐ Applicant submits the following explanations:
_____.

IV. Continuations/Divisionals/PCT National Stage Applications

1007562072
 102253.57240US 22 DEC 2005

☐ Documents _____ were of record in parent application Serial No. _____, filed _____, from which this application claims benefit. As provided in 37 C.F.R. §1.98(d), copies of the documents are not being provided since they were previously submitted to or cited by the United States Patent and Trademark Office in the afore-mentioned parent application.


☒ Copies of document(s) AC-AE listed on the attached form PTO-1449 have already been provided by the International Searching Authority, therefore, duplicate copies are not attached hereto.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

If necessary, this paper should be considered as an authorization to charge Deposit Account 05-1323, Attorney Docket No.: 102253.57240US, for the fee set forth in 37 C.F.R. § 1.17(p).

Respectfully submitted,

December 22, 2005



 J. D. Evans
 Registration No. 26,269

CROWELL & MORING LLP
 Intellectual Property Group
 P.O. Box 14300
 Washington, DC 20044-4300
 Telephone No.: (202) 624-2500
 Facsimile No.: (202) 628-8844
 JDE:lck
 dn#

IAP20 Rec'd PTO 22 DEC 2005

PTO/SB/88a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known	
			Application Number	(To Be Assigned) 2071
			Filing Date	December 22, 2005 2071
			First Named Inventor	Yoshitaka SUGAWARA
			Art Unit	(To Be Assigned)
			Examiner Name	(To Be Assigned)
Sheet 1 of 2	Attorney Docket Number	102253.57240US		

U.S. PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				

FOREIGN PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	AA	JP 3409507 B2	03/20/2003	SHIN ETSU CHEM. CO., LTD.		ABS
	AB	JP 3395456 B2	02/07/2003	SHIN ETSU CHEM. CO., LTD.		ABS
	AC	JP 57-131250 A	08/14/1982	FUJITSU LTD.		
	AD	JP 05-152361 A	06/18/1993	SANYO ELECTRIC CO., LTD.		
	AE	JP 2002-324920 A	11/08/2002	KANEGAFUCHI CHEM. IND. CO., LTD.; NICHIA CHEM IND. LTD.		

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	(To Be Assigned) PCT/JP2004/010315
				Filing Date	December 22, 2005
				First Named Inventor	Yoshitaka SUGAWARA
				Art Unit	(To Be Assigned)
				Examiner Name	(To Be Assigned)
Sheet	2	of	2	Attorney Docket Number	102253.57240US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AF	Y. SUGAWARA, ET AL., "12-19kV 4H-SiC Pin Diodes With Low Power Loss", Proceedings of 2001 International Symposium on Power Semiconductor Devices & IC's, (2001) pp. 27-30	
	AG	International Search Report Dated November 02, 2004 W/ Partial English Translation (Three (3) Pages)	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.